MEMORANDUM OF UNDERSTANDING

between the

MONTANA DEPARTMENT OF MILITARY AFFAIRS DISASTER AND EMERGENCY SERVICES DIVISION

and the

U.S. GEOLOGICAL SURVEY NATIONAL MAPPING DICIPLINE

1. PURPOSE

This Memorandum of Understanding (MOU) sets forth the general terms and conditions by which the Disaster and Emergency Services (DES) Division of the State of Montana, Helena, Montana, and the National Mapping Discipline of the U.S. Geological Survey (USGS), Reston, Virginia agree to cooperate in activities of mutual interest, such as USGS/State Emergency Response Support activities, hazard mitigation, geographic and cartographic data production, geospatial data standards, exchange of data, information, and products, Homeland Defense and State / National security working groups, and research and applications projects, workshops, training, and technology transfer.

2. BACKGROUND

The mutual needs and objectives of the cooperating parties warrant this agreement. Mutual goals and objectives of each organization as they relate to Homeland Security, Homeland Defense, the 133 Cities Project, Emergency Management and Geographic Information Acquisition support the need for collaboration.

The Department of Military Affairs oversees the activities of the Montana Army and Air National Guard, Disaster and Emergency Services Division. The department is administered by the Adjutant General and his staff, as provided for in section 2-15-1202, MCA. The department manages a joint federal-state program that keeps in readiness trained and equipped military organizations for the Governor in the event of a state emergency and the President in the event of a national emergency. Federal agencies control the military strength and mobilization missions of the Montana Guard.

Specifically, the DES plans for and coordinates state responses in disaster and emergency situations (Title 10, Chapter 3, MCA). The department administers an environmental program for the Army National Guard, and the Montana DES takes the lead in coordinating comprehensive emergency management in Montana. DES goals include: Ensure that a Comprehensive Emergency Management program exists in Montana to save lives and property; reduce human suffering and enhance the recovery of communities after disaster strikes and provide quality customer service.

The USGS, National Mapping Discipline has a mission to meet the Nation's need for basic geospatial data, ensuring access to and advancing the application of these data and other earth science information for users worldwide. This is being accomplished by ensuring the production and availability of basic cartographic and geographic spatial data of the country, coordinating national geospatial data policy and standards, providing leadership for the management of earth science data and for information management, acquiring, processing, archiving, managing, and disseminating the land remote sensing data of the Earth, and improving the understanding and application of geospatial data and technology. The USGS serves the Nation by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage

water, biological, energy, and mineral resources; and enhance and protect our quality of life. USGS seeks to enter into long-term, strategic agreements with partners having common missions, interests and goals.

3. SCOPE

This MOU serves as an umbrella agreement that sets forth the general terms and conditions under which the Montana Department of Emergency Services and the USGS National Mapping Discipline will coordinate and cooperate in activities involving various aspects of geospatial and remotely sensed data. The activities covered by this MOU will be of mutual interest within but not limited to, the following areas:

- a. <u>Emergency Preparedness</u> Coordinate data and information to facilitate emergency preparedness. Specifically, provide in accordance with applicable data pricing and distribution policies and data use agreements, USGS Landsat 7, NASA TERRA System data, USGS spatial data, and other satellite imagery and ancillary data to support data preparedness needs.
- b. <u>Homeland Security Coordination</u> USGS will assist in the coordination of Homeland Security through the Montana Homeland Security Task Force's GIS working group. USGS and DES will work together to support this Task Force as well as other Homeland Security activities.
- c. <u>Emergency Response and Hazard Mitigation</u>-The DES and USGS will work cooperatively to provide appropriate products quickly in response to emergencies resulting from events such as, wild fires, floods, earthquakes, homeland security threats and drought. Longer-term collaborative efforts may address hazard mitigation strategies.
- d. <u>Geographic and Cartographic Data Production</u>-The DES and USGS may cooperate in data acquisition, production and maintenance activities to support mutual requirements for Homeland Defense, National and State Security, The National Map and the Montana Spatial Data Inventory. This may include cooperatively producing a data structures theme, and associated standards.
- e. Digital Geospatial Data Standards The DES and USGS will work toward the goal of harmonizing data structures and standards, and flexibility in data formats to facilitate compatible environments between the two agencies and their programs.
- f. Exchange of Topographic Information, Data, and Products-The DES and USGS will work cooperatively in the exchange and reimbursement of published products and data. These include: standard topographic maps, imagery, remotely sensed data, digital products, data, and other releasable products and publications. The scope of this cooperative activity may be expanded by mutual agreement to include other DES and USGS products not currently part of the exchange and reimbursement program.
- g. <u>Research and Applications</u>-The DES and USGS may collaborate in the conduct of a broad range of research and applications projects, and other activities of mutual interest, such Home Land Defense requirements and projects.
- h. Workshops, Training, and Technology Transfer-The DES and USGS will collaborate, when appropriate, on holding workshops, providing training, and the transfer of technology when appropriate and of mutual interest.

- i. <u>Outreach and Education</u>-When appropriate, the DES and USGS will cooperate on joint outreach and educational activities to promote and educate others concerning joint missions and interest.
- j. <u>Archiving</u> Coordinate the archival preservation of geographic data. Support the long-term storage of homeland defense and hazards datasets. Provide public access to archived data as appropriate.

4. AUTHORITIES

The Department of Military Affairs oversees all activities of the Montana Army and Air National Guard, Disaster and Emergency Services Division. The Adjutant General and his staff administer the department, as provided for in section 2-15-1202, MCA Specifically, the DES plans for and coordinates state responses in disaster and emergency situations (Title 10, Chapter 3, MCA).

The U.S. Geological Survey derives authority for its activities from specific pieces of legislation including its annual appropriation acts and various executive orders and public laws. This Memorandum of Understanding and specific cooperative opportunities between the Montana Department of Military Affairs, Emergency Services Division and the U.S. Geological Survey's, National Mapping Discipline is authorized under the authority of the Economy Act of June 30, 1932, as amended (31 USC 1535) and; Public Law 100 (43 USC50); Public Law 206 (43 USC45); Public Law 95-124 (42 USC 7701); Public Law 98-365 (15 USC 4201).

5. POLICIES

This Memorandum of Understanding is established between the U.S. Geological Survey, National Mapping Discipline and the Montana Department of Military Affairs, Department of Emergency Services under the authority of the Department of the Interior, Geological Survey Manual 500.1.1: Policies of the USGS in Cooperative Work with States, Counties, Municipalities, and other Political Subdivisions.

6. **DEFINITIONS**

None.

7. RESPONSIBILITIES

- a. The DES and USGS will continue to maintain open communication and coordination to facilitate a cooperative working environment to support current agency missions and future requirements.
- DES and USGS will provide leadership and program oversight of the cooperative activities conducted under this MOU.

8. IMPLEMENTATION

a. Implementation and guidance of this MOU shall be supported by appropriate attachments, amendments and statements of work. These implementation tools will be coordinated through mutual agreement between the Department of Emergency Services and the Chief, Rocky Mountain Mapping Center or their designated representatives.

9. FINANCIAL ARRANGEMENTS

a. The DES and USGS will partner together at no cost where applicable and acceptable to both parties. Where costs are incurred and reimbursement is agreed upon, the cost will be recovered by purchase orders or other applicable methods. Financial arrangements can include but are not limited to direct appropriations, cost/work share, full reimbursement, or exchanges in kind. Performance of either party under the terms of this MOU is subject to the availability of appropriated funds and personnel resources through their respective funding procedures.

10. EFFECTIVE DATE, PERIODIC REVIEW, MODIFICATION, AND TERMINATION

This MOU shall take effect upon the date of the last signature. The DES and USGS will conduct a formal review of this MOU at least every 5 years. Supporting annexes will be reviewed on a yearly basis, or sooner, as circumstances warrant. This MOU may be modified at any time upon joint approval. This MOU may be terminated at any time by mutual written agreement of the agencies, or by either agency upon 90 days written notice to the other agency.

11 POINTS OF CONTACT

The following individuals will be the points of contact for this MOU:

MT Disaster and Emergency Services Division

Mr. Jens Bolsted, GIS Coordinator P.O. Box 4789 - 1100 North Main Helena, Montana 59604-4789 Phone: 406-841-3955 - FAX: 841-3965

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U.S. Geological Survey, National Mapping Discipline

Mr. Lance S. Clampitt, State Mapping Liaison P.O. Box 173492, AJM Johnson Hall, MSU Bozeman, Montana 59717-3492

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lsclampitt@usgs.gov

12. APPROVALS

MT Disaster and Emergency Services Division

Mr. James Greene, Administrator MT Department of Military Affairs Disaster and Emergency Services Division U.S. Geological Survey, National Mapping Discipline

Mr. Craig Skalet, Chief, Rocky Mountain Mapping Center

U.S. Geological Survey

National Mapping Discipline

ATTACHMENT A

Specific Guidelines for Potential Data and Information Requirements

<u>Narrative:</u> This attachment will be used as a quick reference to facilitate the Montana Disaster and Emergency Services Division's data and information requirements.

<u>Footprint</u>: The agreed upon footprint for Helena, Montana will include the city of Helena and outlying areas of specific Homeland Security interest. Attachment B defines areas of specific interest to the DES. Attachment C is the National Imagery and Mapping Agencies, 133 Urban Area footprint for Helena, MT.

Exchange Medium: When possible the data should be transferred using electronic means. CD ROM is the preferred hard copy medium.

Image Data Specifications: The agreed upon specifications for image / raster base data will be.

Image Format:

GeoTIFF

Projection Type:

Montana State Plane Coordinates

Datum Type:

North American Datum 1983

Unit Type:

Meters

<u>Vector Data Specifications</u>: The agreed upon specifications for vector base data will be.

Vector Format:

Arc Shape File or ESRI (e00) Export File

Projection Type:

Montana State Plane Coordinates

Datum Type:

North American Datum 1983

Unit Type:

Meters

Text Data or Information Specification: The agreed upon specifications for text information will be.

Text or Rich Text (RTI) Format

* All data should be documented in compliance with the Federal Geographic Data Committee (FGDC) Metadata Standard.

Geographic Centers:	Longitude / Latitude
Area # 1	112.03111 / 46.63000
Area # 2	111. 796 39 / 46.6 897 2
Area # 3	111.94722 / 46.85389
Canyon Ferry Dam	111.72694 / 46.64861
Lake Helena	111.90111 / 46.70278
Holter Dam	112.00500 / 46.99167
Hauser Dam	111,88500 / 46.76500
City of Helena	112.03194 / 46.60000
East Helena	111.91472 / 46.58972
State Capital Grounds	112.01667 / 46.58556

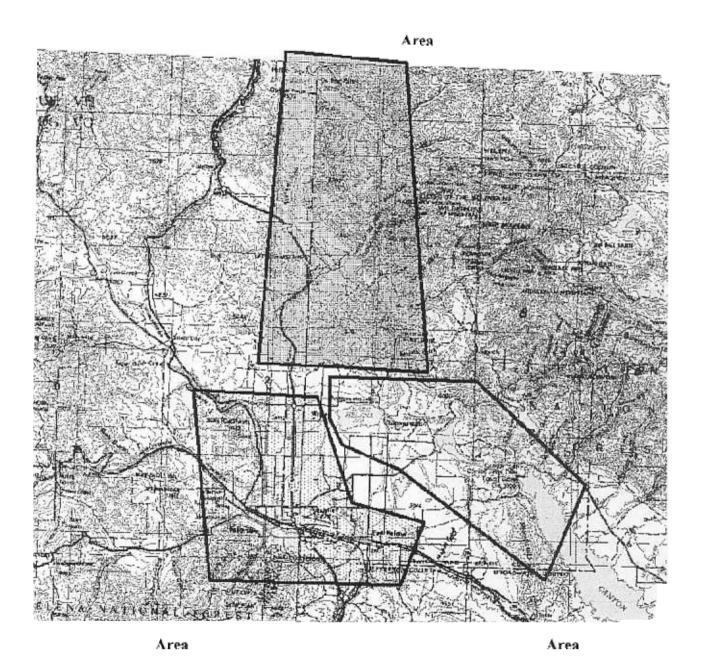
ATTACHMENT B

Helen Area oot Prin

A He opulated Area

A Lake Hele C you Ferry Lake D

pe H Itel Lake, H Itel Lal Dam, Ha D ver Pl



ATTACHMENT C

NIMA 133 Urban Area Footprint

Helena, MT (NIMA 133 Urban Areas for Domestic Preparedness)

